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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 09/546,952 | 04/11/2000 | Mandayam. Anandampillai Sridhar | AMPSP002 | 4235 |

7590        05/14/2003

Joseph A Nguyen
3410 Antonacci Ct
San Jose, CA  95148

| EXAMINER |
|---|
| MIZRAHI, DIANE D |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2175 | |

DATE MAILED: 05/14/2003

11

Please find below and/or attached an Office communication concerning this application or proceeding.

| | **Application No.** | **Applicant(s)** |
|---|---|---|
| **Office Action Summary** | 09/546,952 | SRIDHAR, MANDAYAM. ANANDAMPILLAI |
| | **Examiner** | **Art Unit** |
| | DIANE D. MIZRAHI | 2175 |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *17 April 2003* .

2a)☒ This action is **FINAL**.　　　2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1 and 2* is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 2* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

*/Diane D. Mizrahi/*
*DIANE D. MIZRAHI*
*PRIMARY PATENT EXAMINER*
*TECHNOLOGY CENTER 2100*

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

　　If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All b)☐ Some * c)☐ None of:

　　　1.☐ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____ .

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

　　a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *8* .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

III.    DETAILED ACTION

Claims 1-2 are presented for examination.

In response to communications filed on April 17, 2003, the

Claims 1-2 are pending in the application, Applicant's arguments

have been reconsidered but are not deemed persuasive for the

reasons set forth below.

### *Response to Applicant's Remarks*

Examiner has completed a through review and study of

Applicant's amendment of April 17, 2003; especially, Applicant's

amendments to claims 1-2 and remarks at page 3.

Applicant's amendments to claims 1-2 further direct the

claimed invention to a data schema that implements a relational

database scheme in a graph.     Examiner asserts that Sutter (US

Patent No. 6, 6,446,092 B1 and Sutter hereinafter) in

combination with Chang et al. (US Patent No. 6,061,515 and Chang

hereinafter) teaches Applicant's new claimed invention of:

"constructing links among said nodes of said graph form said

foreign key" (i.e. Foreign keys are used to define a link to

another table. A foreign key is a key taken from another table

to create a linking value to serve as a means of navigation from

one table to the other table. A table may contain as many

foreign keys as links it requires to relate it to other tables

with which it has relationships) (Chang, col 4, lines 12-20).

Regarding Applicant's comment that Sutter does not teach

the *newly* added claimed limitation, "constructing links among

said nodes of said graph form said foreign key", Examiner

asserts that Sutter in combination with Chang teaches

Applicant's invention.

Applicant is inaccurate for the reasons explicitly stated

in the first Office Action dated 10-9-02 and this new office

action.

These reasons have been explicitly stated in the first

Office Action.  Please see the next section.


## *Claim Rejections - 35 USC 103*

The following is a quotation of 35 U.S.C. 103(a) which

forms the basis for all obviousness rejections set forth in this

Office action:

> (a) A patent may not be obtained though the invention is not identically
> disclosed or described as set forth in section 102 of this title, if the
> differences between the subject matter sought to be patented and the prior
> art are such that the subject matter as a whole would have been obvious at
> the time the invention was made to a person having ordinary skill in the
> art to which said subject matter pertains.  Patentability shall not be
> negatived by the manner in which the invention was made.


Claims 1-2 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Sutter  (US Patent No. 6,446,092) and  Chang et

al. (US Patent No. 6,061,515).

Regarding Claim 1, Sutter teaches a computer-implemented method for representing a data schema that implements a relational database scheme in a graph, comprising: identifying tables of said data schema; (col 37, lines 15-31)representing said tables as nodes (col 4, lines 10-21)of said graph (i.e. spanning tree) (col 18, lines 3-24); identifying foreign key relationships pertaining to individual tables of said data schema (col 44, lines 1-40); and representing said foreign keys relationships as links of said graph (col 44, lines 1-40; col 49, lines 1-45).

***In regards to Applicant's new limitation*** -- constructing links among said nodes of said graph form said foreign key—

Sutter does not teach the claimed, "constructing links among said nodes of said graph form said foreign key".

Chang teaches constructing links among said nodes of said graph form said foreign key (i.e. Foreign keys are used to define a link to another table. A foreign key is a key taken from another table to create a linking value to serve as a means of navigation from one table to the other table. A table may contain as many foreign keys as links it requires to relate it to other tables with which it has relationships) (Chang, col 4, lines 12-20).

It would have been obvious to a person of ordinary skill in the art at the time of Applicant's invention to modify

the teachings of Sutter with the teachings of Chang to include

constructing links among said nodes of said graph form said

foreign key with the motivation to allow the user an improved

user interface and to allow the user to define a mapping between

conventional data store schema (Chang, col 4,lines 48-67).

Regarding Claim 2, Sutter teaches representing said data

schema as a graph, including identifying tables of said data

schema, representing said tables as nodes of said graph (col 4,

lines 10-21), identifying foreign key relationships pertaining

to individual tables of said data schema (col 44, lines 1-40)

and representing said foreign keys relationships as links (col

44, lines 1-40) of said graph; extract from said graph a

plurality of possible relationships pertaining to a node in said

graph (col 18, lines 66-67 to col 19, lines 1-30), said

plurality of possible relationships (col 18, lines 66-67 to col

19, lines 1-30) pertaining to foreign key relationships that

said node has with other nodes of said graph; presenting said

plurality of possible relationships to an operator of a computer

(col 36, lines 26-65); and facilitating selection of one of said

plurality of possible relationships (col 18, lines 66-67 to col

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It would have been obvious to a person of ordinary skill in the art at the time of Applicant's invention to modify the teachings of Sutter with the teachings of Chang to include constructing links among said nodes of said graph form said foreign key with the motivation to allow the user an improved user interface and to allow the user to define a mapping between conventional data store schema (Chang, col 4,lines 48-67).

Examiner asserts that all pending claims are not allowable over the prior art made of record.

### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### *Points of Contact*

24. Any inquiry concerning this communications from the examiner should be directed to Diane Mizrahi whose telephone number is (703) 305-3806. The examiner can normally be reached on Monday to Thursday from 7:30 AM. to 5:00 PM.

If any attempt to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Thomas Black can be reached on (703) 305-9707. The fax phone number for this group is (703) 308-9731.

Diane Mizrahi
Primary Patent Examiner
Art Unit 2175

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statutory period, then the shortened statutory period will
expire on the date the advisory action is mailed, and any
extension fee pursuant to 37 CFR 1.136(a) will be calculated
from the mailing date of the advisory action.  In no event,
however, will the statutory period for reply expire later than
SIX MONTHS from the date of this final action.

## *Points of Contact*

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Diane Mizrahi
Primary Patent Examiner
Art Unit 2175